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A NEW PEARL OYSTER FROM THE HAWAIIAN ISLANDS

BY

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A NEW PEARL OYSTER FROM THE HAWAIIAN ISLANDS

By Paul Bartsch

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The explorations of the Pearl and Hermes reefs and the waters of Oahu, Hawaiian Islands, last summer by Dr. Paul S. Galtsoff, of the United States Bureau of Fisheries, yielded a lot of material which plainly shows that the large pearl oyster of these regions is not *Pinctada cumingi* Reeve as usually considered, but a new species, which I take pleasure in naming for Doctor Galtsoff, who has transmitted his material to me for identification.

PINCTADA GALTSOFFI, new species

Plates 1 and 2, figures 1, 2, and 3; figures 7 and 8, type

Description.—Shell large, varying in shape from irregularly ovate to subquadrate, rather compressed. Hinge oblique, rather short and deep; byssal notch of the right valve deeply infolded. The outside of the shell is much laminated. In old shells, like the type, these laminations do not show the fimbriations at the free border present in young individuals. The outside is covered by a yellowish-olive periostracum. The nacre of the inside is lustrous silvery pearly gray, with a bluish tinge sometimes bordering on purple near the edge in old shells, as in the type. The outer margin in the type is yellowish horn-colored. In young specimens a band near the edge of the nacreous portion may be gold green with a greenish tinge or smoky with a greenish suffusion and decidedly irridescent. The marginal border in young individuals may be brown, variegated with radiating bands of darker brown or the edge may be quite deeply smoke gray or almost sooty black. Adductor muscle scar large, a little paler than the rest.

Type.—The type, U.S.N.M. No. 282426, comes from the Pearl and Hermes reefs, and measures: Altitude, 288.0 mm.; length, 233.0 mm.; thickness, 75.0 mm.

Remarks.—The United States National Museum contains other specimens from the Pearl and Hermes reefs, as well as from the islands of Maui, Oahu, and Hawaii.

The short hinge and deeply folded byssal notch suggest a decided relationship with *Pinctada margaritifera* (Linnaeus). This becomes emphasized in young shells, which have the dark marginal border characteristic of the dark-lipped shells. The yellow edge of adult shells, on the other hand, suggests *Pinctada maxima* (Jameson), from which it may be at once distinguished by the short and more oblique hinge. Some young specimens of the present species suggest *Pinctada margaritifera cumingi* (Reeve). This, however, is a much smaller species with decidedly darker inner border; it also has a much more strongly rayed exterior, and comes from Lord Hood Island, situated on the Paumotu shelf, which is quite distinct from the platform of the Hawaiian group.

I have attempted to show some of these differences in the plates.

EXPLANATION OF PLATES 1 AND 2

FIGURES 1, 2, 3. *Pinctada galtsoffi*, new species.
4, 5. *Pinctada margaritifera cumingi* (Reeve) from Raiatea Island, Society Islands.
6. *Pinctada maxima* (Jameson) from Bubuan Island, Jolo, Philippine Islands.
7, 8. *Pinctada galtsoffi*, new species. Type specimen.

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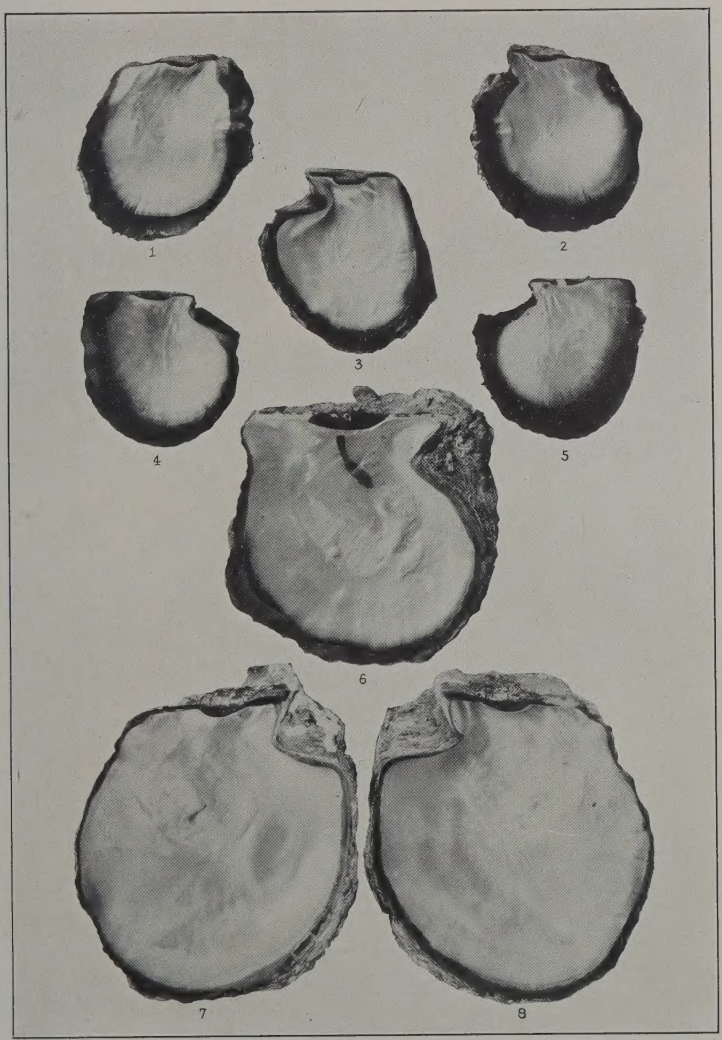
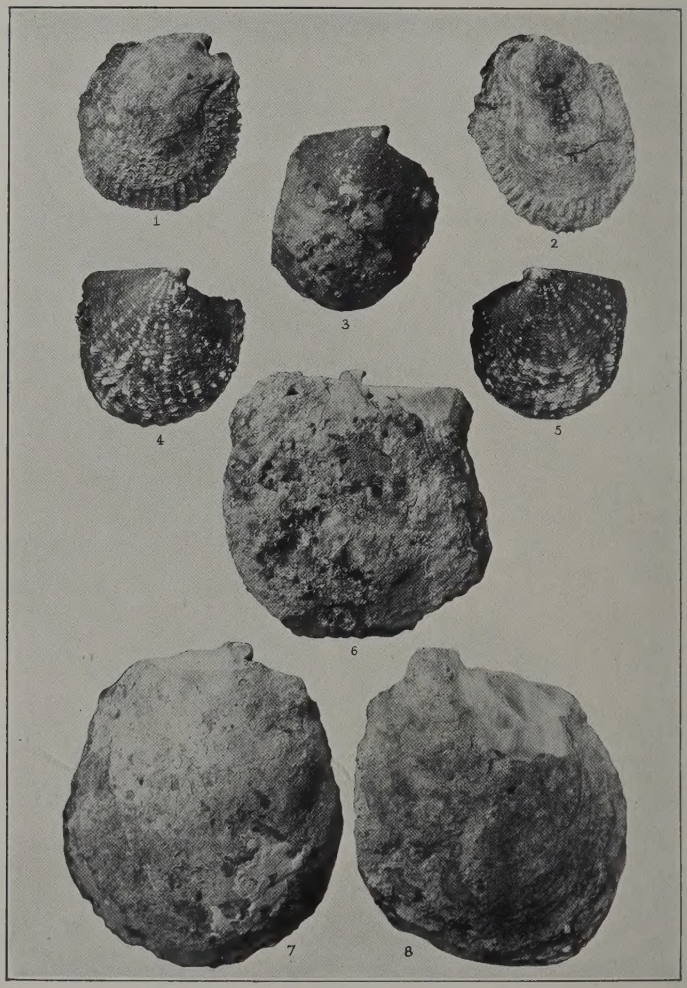


INTERIOR OF SPECIES OF PINCTADA

FOR EXPLANATION OF PLATE SEE PAGE 2.



EXTERIOR OF SPECIES OF PINCTADA

FOR EXPLANATION OF PLATE SEE PAGE 2.